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RRR000622

EIS Office, US Dept of Energy
Office of Civilian Radioactive Waste Mgmt
1551 Hillshire Drive M/S 011,
Las Vegas, NV 89134

Attention: Dr. Jane Summerson:

Re: *Draft Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada*

1 [In our comments on the original Yucca Mountain Draft Environmental Impact Statement (EIS), the Nevada Nuclear Waste Task Force stated that the EIS had been issued prematurely since there was not enough information on the decisions being considered. This draft supplement to that EIS is also premature to the extent that we believe it violates the requirements of the National Environmental Policy Act (NEPA). This document claims to consider the impacts of a repository design that continues to change. And the changes are not just minor adjustments to details but whole new concepts that, at this point, are merely specifications for designs. In addition, and also due to the preliminary status of the transportation, aging, and disposal (TAD) canisters, the public is prohibited from obtaining important information because the Department of Energy (DOE) is still in negotiations with possible vendors. It is not worthwhile to comprehensively consider the TAD design which, at this point is a moving target.] ... continued below

2 [Additionally, the repository system has been and will be analyzed using a Total System Performance Assessment (TSPA). The TSPA-SEIS is different from the previous version and the TSPA for a license application will also have significant differences. For more than a decade, the Task Force has held the position that a TSPA is best used to tell the Department what is does not know rather than a tool to provide reasonable assurance of safety based on what is believed to be known about the Yucca Mountain repository system.]

The following are the Task Force comments regarding this document:

3 [The description of the Yucca Mountain site states: "The site has several characteristics that would limit potential long-term impacts..." (Summary, page S-7)

- It is isolated from concentrations of human population and human activity ...
Perhaps a town of 1,700 people (Amargosa Valley) is not enough to be considered "concentrated" but in addition to the people, there are thousand of cows and the State of Nevada's largest dairy, including a large operation that meets the strict standards for organic production. Amargosa Valley is at the boundary of the accessible environment where any radionuclides caried in groundwater from Yucca Mountain will go.
- It is on land controlled by the Federal Government.
Some of the land is controlled by the U.S. Air Force, some is under the control of the Nevada Test Site (NTS) and all of it is within the treaty lands of the Western Shoshone Nation. In the FEIS, DOE noted that the Shoshone Nation opposed the repository at Yucca Mountain but nothing further was said. There is the potential for serious land use conflicts with possible future activities at both NTS and the Air Force air space over and near Yucca Mountain and there may be cumulative impacts that were not adequately addressed here or in the FEIS.
- A repository at Yucca Mountain would benefit from the arid conditions at the site –
Climate conditions are predicted to change rapidly. A high-level nuclear waste repository must isolate waste for up to a million years. Throughout the dangerous lifetime of the waste, the region is expected to experience climate cycles that would include ice ages, wetter conditions and perhaps weather patterns that are different from those of the past or present.

Groundwater beneath Yucca Mountain flows into a "closed" hydrogeologic basin from which it cannot flow to any river or ocean.

This statement is not true. The Yucca Mountain region is a unique setting that includes the Amargosa River which is prone to dangerous and destructive flooding. The aquiferr may also connect to Death Valley. Water within the region comes to the surface at playas and dry lake beds during floods and then it evaporates. Any radionuclides carried to the surface with the water would be released to the air when water evaporates and would provide additional doses to the people, plants and livestock who were also ingesting contaminated groundwater from wells. Water scarcity is considered a positive attribute for the site and the Yucca Mountain region does have scarce water, but that means that any contamination has more severe public impacts than at locations where water is plentiful.

- To develop a repository at Yucca Mountain, DOE would have to obtain permanent control...
The SEIS only considers the Congressional action needed to withdraw land controlled by the Air Force, Bureau of Land Management and Department of Energy. No mention is made of the Western Shoshone treaty.

In addition to the DOE-assumed positive attributes for a Yucca Mountain repository

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listed in the SEIS, there are a number of very negative and unique drawbacks – frequent and significant earthquakes, the possibility of future volcanoes, and Air Force pilot and plane testing including bombing and war tactics practice. It is noted in the SEIS that: "Because of the height of the stacks (ventilation), the U.S. Air Force might require DOE to install flashing beacon lights on top of them." Lights might warn pilots but they will not protect the facility from catastrophic damage if there is a crash of an aircraft.]

[In the description of the use of TADs in repository operations, the SEIS states that TADS would be loaded at reactor sites where they would be sealed and never reopened. This would require all who handle the TAD from that point on to trust that the contents had been perfectly loaded and perfectly identified and described. A plan with no allowance for error in the most important aspect of the preclosure phase of the repository system is unrealistic and should not be pursued. Any worker at Yucca Mountain as well as transporters of the waste could pay the consequences for errors made by others. In addition to the workers and members of the public who have to rely on the proper identification and marking of the containers of irradiated fuel, the heat requirements inside the repository are also based on this data.

x This scheme, based on perfection, has been adopted to reduce worker doses at Yucca Mountain. The danger in waste handling operations has not been eliminated; it has just transferred to workers at reactor sites who would be put at greater risk due to more waste handling. They would also be required to be responsible for carrying out the error-free, one-time waste identification and marking operation.

The conceptual design of the TAD specifies a container that would hold fewer assemblies than current dry casks now in use at some reactor sites. This makes the transfer of waste from current containers to TADs more difficult and dangerous because there would be "left over" fuel when an existing dry cask was emptied. Utilities and vendors may not be willing to accept this situation and if they are not, the TAD design will likely change. This would bring changes in all of the analyses regarding the TAD throughout the SEIS. It would also likely change the percentage of waste shipped by rail, barge and truck. All of these considerations and calculations should have been done before the draft SEIS was released for comment.]

5 [It is likely that some of the transport described in the SEIS would be unacceptably risky or impossible to do. Just two examples are: 1) From the Humbolt Bay reactor in CA, TADs would go on heavy-haul transporters for about 150 miles over rugged mountainous terrain in Northern CA to get to a rail line, and 2) The irradiated fuel from the Indian Point reactor in New York would travel about 56 miles down the Hudson River, past Manhattan, under major bridges, over congested tunnels to the Port of Newark in New Jersey to be loaded on to rail cars. Much more analysis is required to understand the public safety implications of these two transport scenarios.] ... Continued below

6 [The waste handling facilities at Yucca Mountain, as well as the tunnels within the mountain would be built in stages during the time of waste receipt and repository loading. DOE intends to apply for a license to receive and possess waste when only some of the buildings are in place and only a very small percentage of the required tunnels in Yucca

Mountain have been excavated. This will result in an extraordinary amount of waste outside of the repository in "aging" containers, not integral to repository operations and tunnels being built from the south end of the main drift and waste being emplaced from the north. The implications of building, storing and emplacing waste simultaneously, have not been adequately analyzed.]

7 [The SEIS considers nationwide transport to Yucca Mountain and says that it will be primarily by rail. The mainline railroads would be used to get to Nevada and then the train would continue on to Yucca Mountain, through Nevada using one of two alternatives. The analysis is confusing and misleading. The comparison is made between a Caliente corridor and the Mina route. DOE is prohibited from ever using the Mina route since the Walker River Piute tribe must agree to the use of the existing line through their tribal lands and, after giving permission for consideration of the route, they issued a letter prohibiting its use. Several other potential routes that did not have restrictions like Mina were considered for construction of a rail line, within Nevada to Yucca Mountain, but none of those lines were used as a reasonable alternative. The Task Force believes that comparing the Caliente corridor to a prohibited route violates the requirements of NEPA because at least two reasonable alternatives were not considered.]

8 [In the consideration of Socioeconomics, the SEIS claims that only very tiny changes would occur in numbers of workers and community impacts to two Nevada counties during construction and operation of a repository. Rural Nevada has a history of severe problems brought on by "boom and bust" cycles. Yucca Mountain would likely create the same phenomenon if a rail line and repository above and below ground facilities are planned to be built simultaneously. That situation was not analyzed. Instead the SEIS says that growth would occur slowly and counties would meet increased demands for housing and services. It is likely that the impacts would not be trivial and the amount of resources would be uncertain and an unfair burden on both urban and rural counties.]

9 [The SEIS does not consider any economic impacts to Las Vegas and the resort industries due to negative stigma associated with a nearby national high-level nuclear waste disposal site. County planners and tourism experts strongly disagree with that assessment. Stigma associated with possible accidents and incidents within at least 100 miles of Las Vegas should be considered because cable television and the Internet can bring "breaking news" to the world instantly so there is no longer a period of lag time for the news to reach far-away places and people.]

10 [On page 31 of the SEIS summary radiation doses are discussed saying: "The highest annual dose would be 6.8 millirems, less than 4 percent of the annual average 200-millirem dose to members of the public from ambient levels of radon-222 and its decay products." This is misleading. Doses from Yucca Mountain or casks on the way to the site are in addition to background or ambient levels of radiation. To receive the same dose at a doctor's office, a person must sign a consent form.]

5 [The SEIS does not adequately consider all aspects of national transport of high-level nuclear waste. The conceptual TAD transportation casks are robust but they are also very heavy and could be built larger than the current concept. This means that the national

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infrastructure, including rail lines, bridges, roads, etc. must be examined. Following the collapse of the Highway 35W bridge across the Mississippi River in Minneapolis, MN, a national survey was done on bridge soundness. The results of that study should be considered as well as the current condition and estimated future condition of roads and rails.]

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Continued [Release of this document was premature because the TAD canister system is still being designed and DOE is continuing with scientific studies. When more was known about the repository system, the SIES could have been produced and put out for public comment.] In any case, if the SEISs were released for public comment in the last quarter of the year, there should have been more time allowed so that the public would have been able to better understand the material. There were two very large documents to go through and the allotted time included the holidays. In addition, it was and still is, nearly impossible to find the correct references on the Licensing Support Network, particularly for people who do not use it regularly. 11

Further evidence of this SEIS being premature is the fact that the DOE does not intend to produce a Record of Decision (ROD) to cover most of the EIS when it is finalized which further limits the public's role in the decision process and reduces the value of the final product.]

Submitted by:

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